STATE OF MARYLAND
DHMH
Maryland Department of Health and Mental Hygiene
Larry Hogan, Governor - Boyd K. Rutherford, Lt. Governor - Dennis R. Schrader, Secretary

January 27, 2017

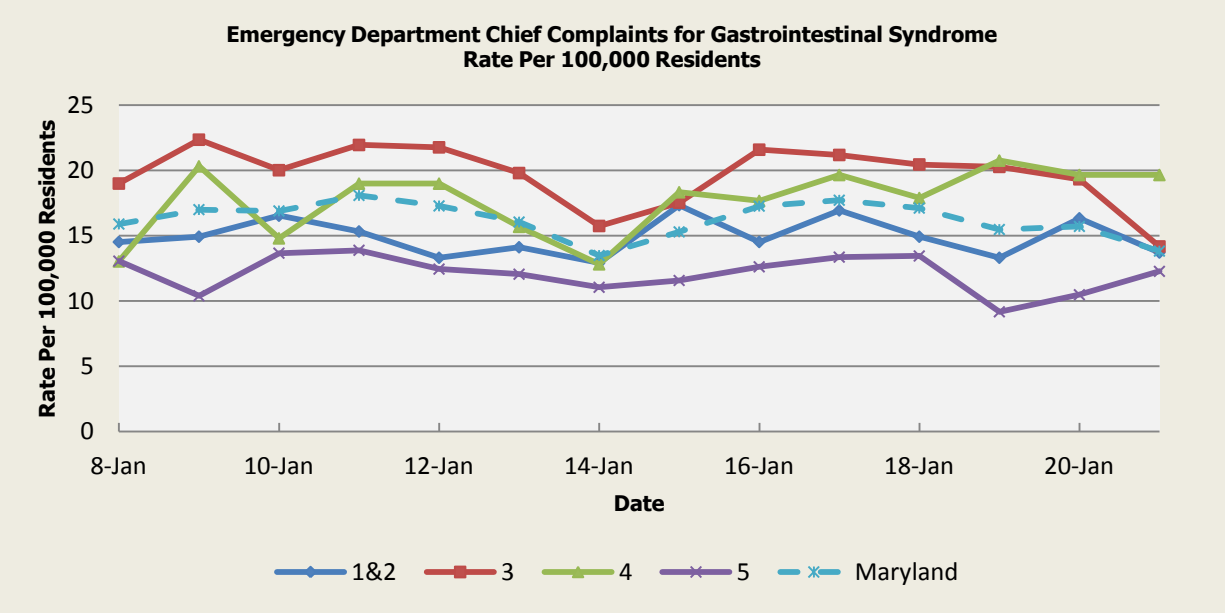
Public Health Preparedness and Situational Awareness Report: #2017:03 Reporting for the week ending 1/21/17 (MMWR Week #03)

CURRENT HOMELAND SECURITY THREAT LEVELS
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were eight (12) gastroenteritis/ foodborne outbreaks reported this week: five (5) outbreaks of gastroenteritis in Nursing Homes (Regions 3,4,5); four (4) outbreaks of gastroenteritis in Assisted Living Facilities (Regions 1&2,3); two (2) outbreaks of gastroenteritis associated with Schools (Region 3,4); one (1) outbreak of gastroenteritis/foodborne associated with a Restaurant (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.94	14.88	15.42	10.31	13.01
Median Rate*	12.70	14.47	14.80	10.17	12.75

* Per 100,000 Residents

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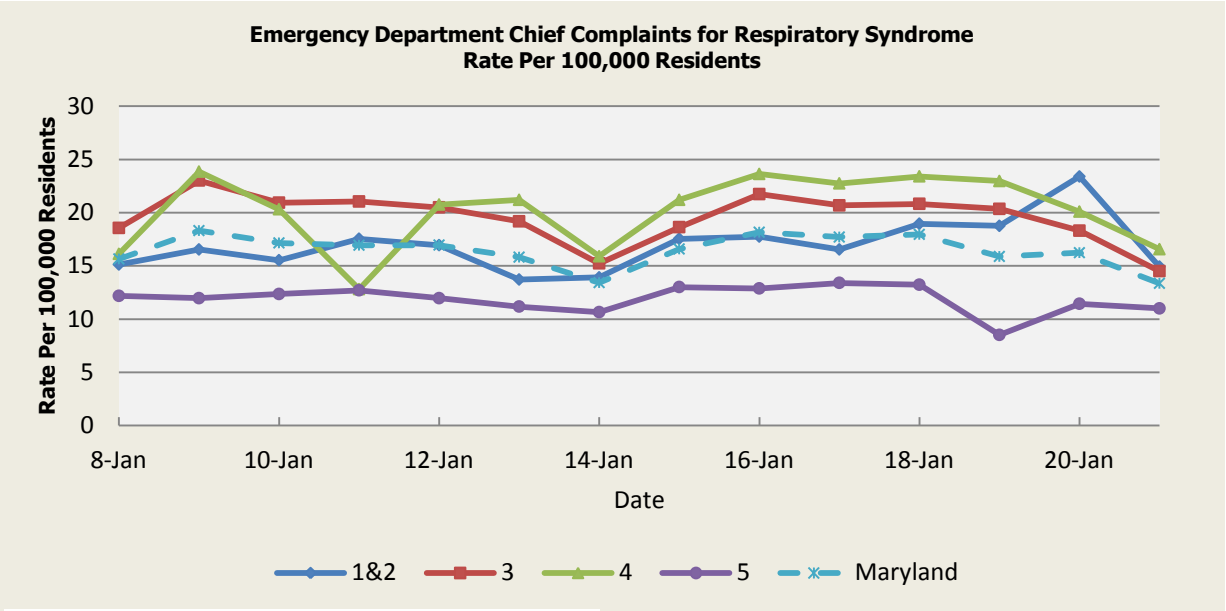
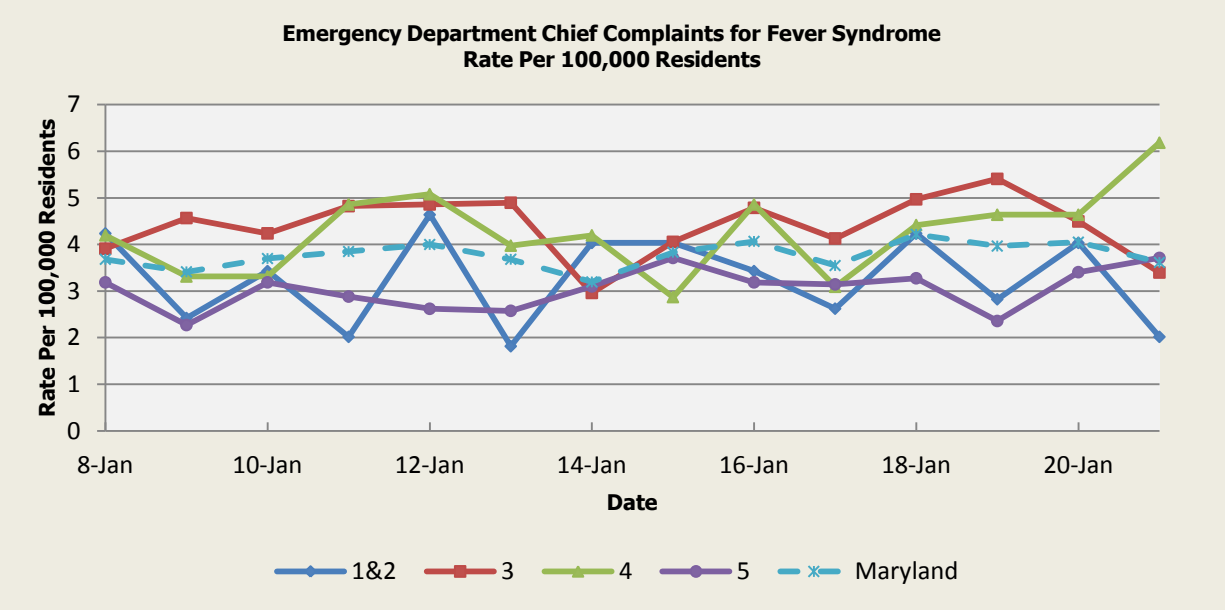


There were five (5) respiratory illness outbreaks reported this week: one (1) outbreak of Influenza in an Assisted Living Facility (Region 3); two (2) outbreaks of Influenza/ Pneumonia in Assisted Living Facilities (Region 3); one (1) outbreak of ILI/Pneumonia in a Nursing Home (Regions 1&2); one (1) outbreak of Pneumonia in a Nursing Home (Region 3).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.99	14.12	14.04	9.94	12.34
Median Rate*	11.70	13.37	13.69	9.52	11.79

* Per 100,000 Residents



There were no fever outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.07	3.80	3.93	3.09	3.48
Median Rate*	3.02	3.62	3.75	2.97	3.35

Per 100,000 Residents

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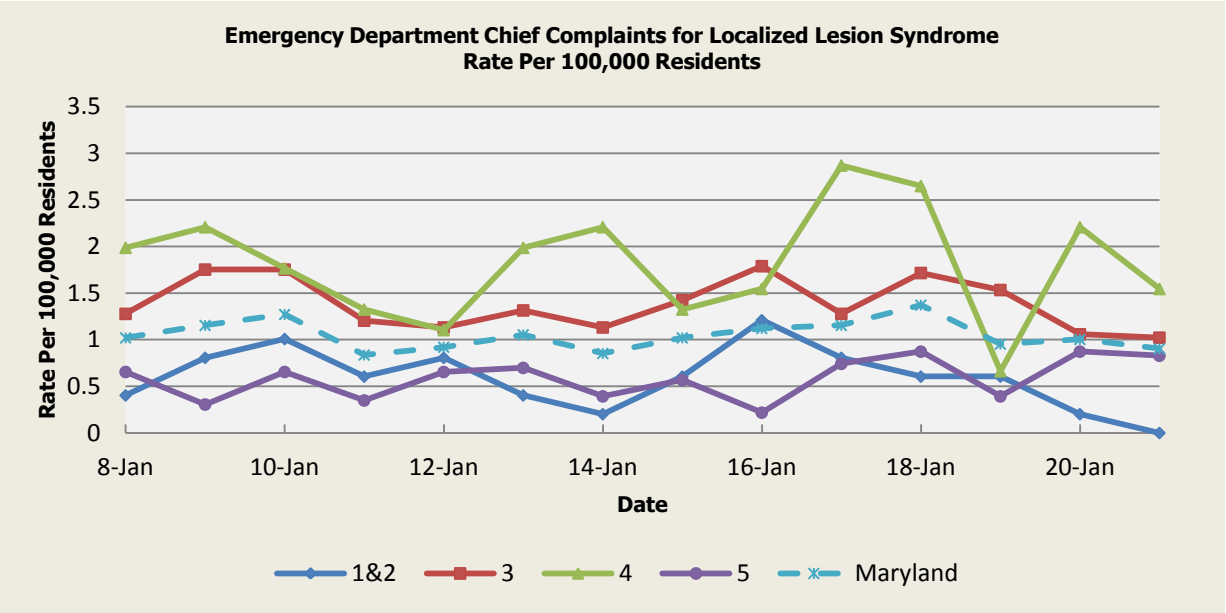
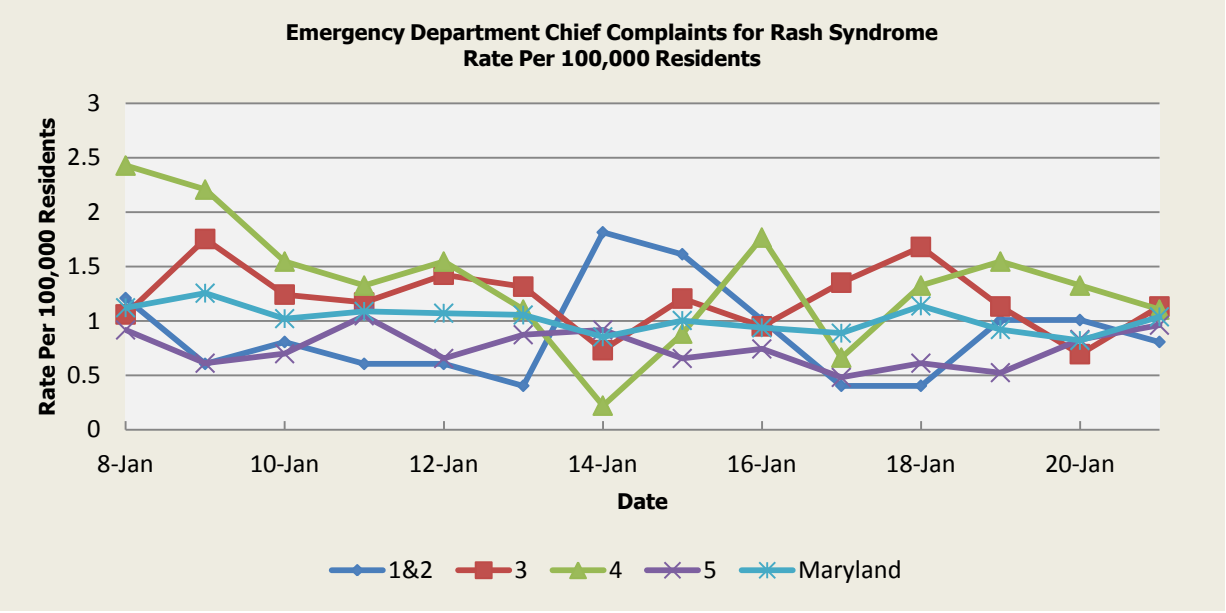


There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.07	1.91	2.03	0.98	1.49
Median Rate*	1.01	1.86	1.99	0.92	1.44

* Per 100,000 Residents



There were no rash illness outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.30	1.75	1.75	1.04	1.44
Median Rate*	1.21	1.68	1.77	1.00	1.39

* Per 100,000 Residents

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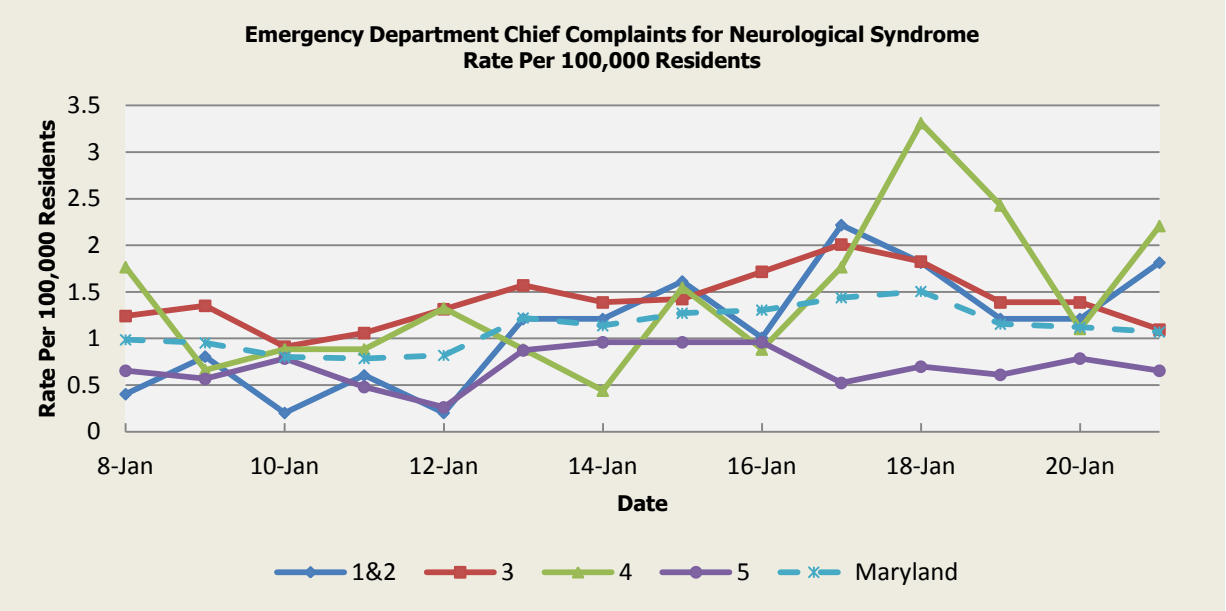
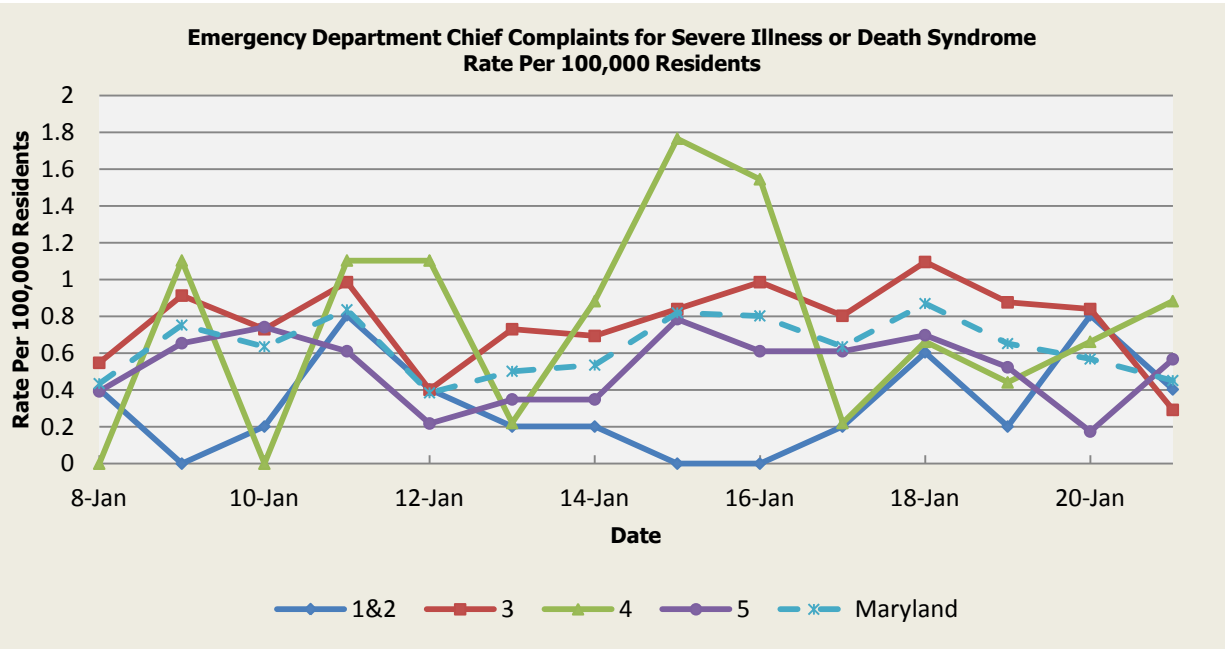


There were no neurological syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.73	0.65	0.48	0.62
Median Rate*	0.60	0.66	0.66	0.44	0.57

* Per 100,000 Residents



There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.70	0.95	0.84	0.44	0.73
Median Rate*	0.60	0.91	0.88	0.44	0.72

* Per 100,000 Residents

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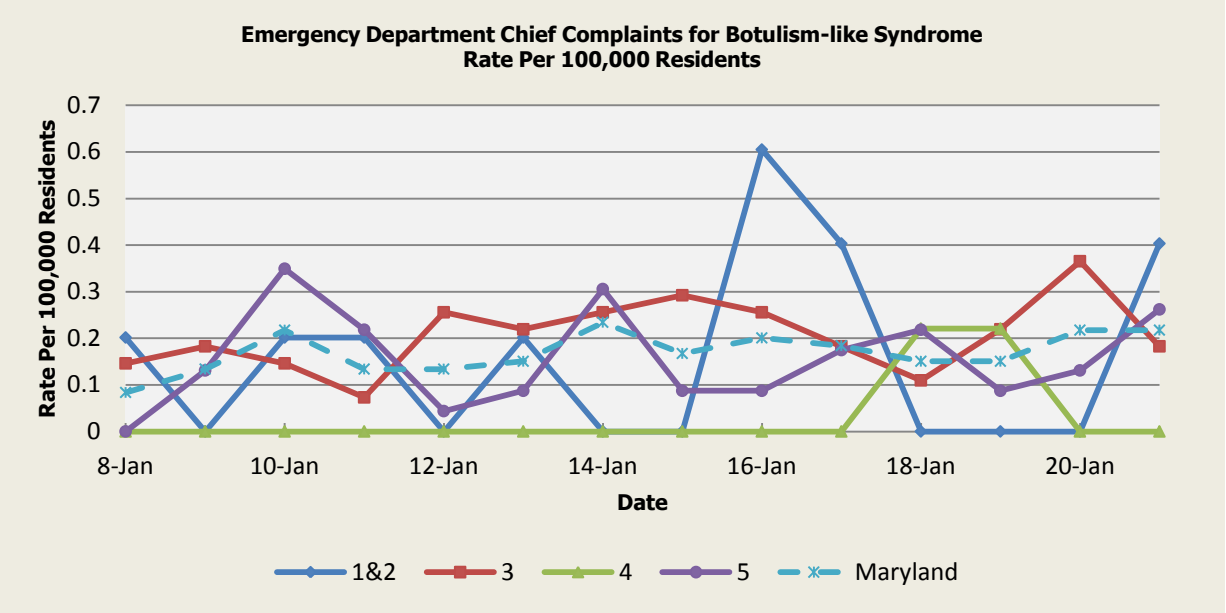
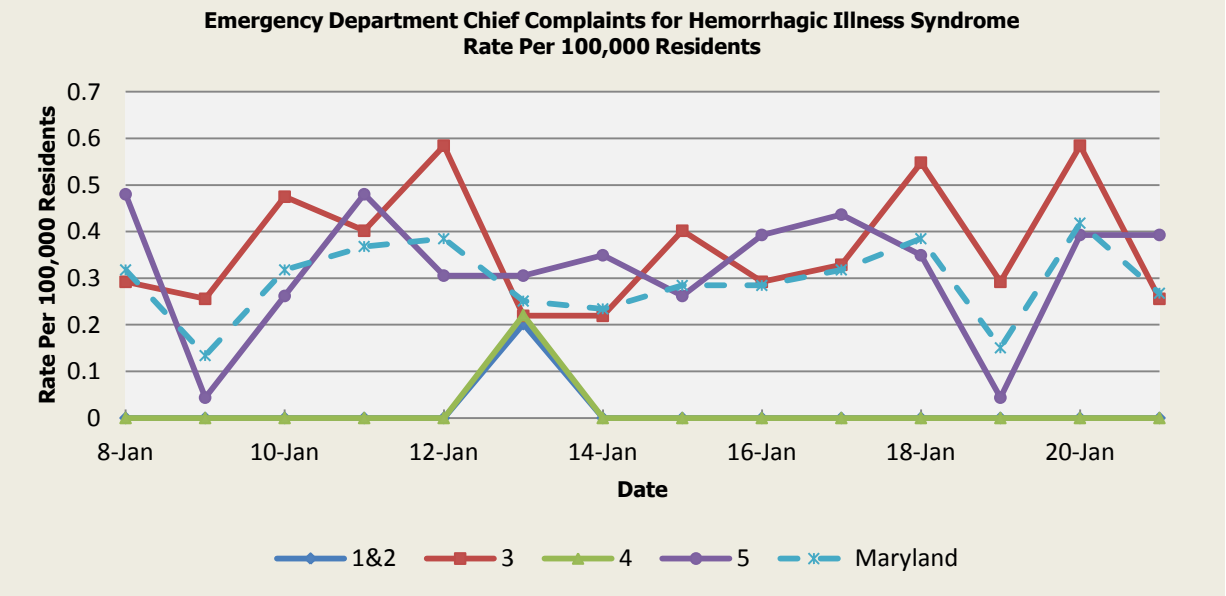
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 1/08 (Regions 1&2), 1/09 (Regions 3,5), 1/10 (Regions 1&2,5), 1/11 (Regions 1&2,5), 1/12 (Region 3), 1/13 (Regions 1&2,3), 1/14 (Regions 3,5), 1/15 (Regions 3), 1/16 (Regions 1&2,3), 1/17 (Regions 1&2,3,5), 1/18 (Regions 4,5), 1/19 (Regions 3,4), 1/20 (Regions 3,5) and 1/21 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 1/08 (Regions 3,5), 1/09 (Region 3), 1/10 (Regions 3,5), 1/11 (Regions 3,5), 1/12 (Regions 3,5), 1/13 (Regions 1&2,3,4,5), 1/14 (Regions 3,5), 1/15 (Regions 3,5), 1/16 (Regions 3,5), 1/17 (Regions 3,5), 1/18 (Regions 3,5), 1/19 (Region 3), 1/20 (Regions 3,5) and 1/21 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.11	0.03	0.08	0.08
Median Rate*	0.00	0.04	0.00	0.04	0.03

* Per 100,000 Residents

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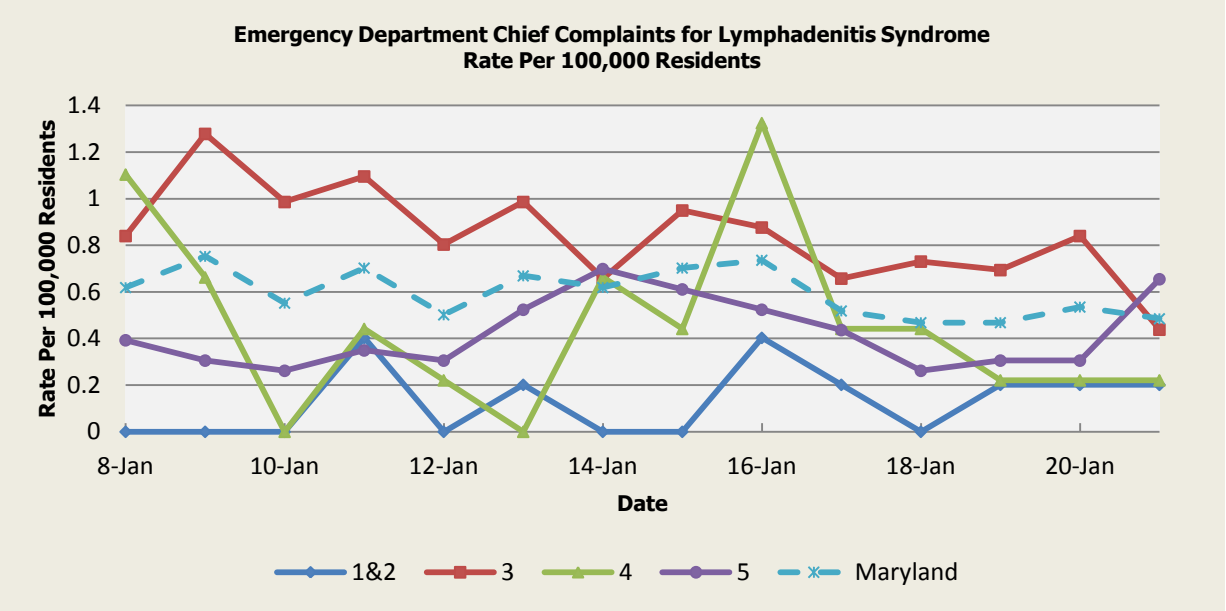

There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 1/08 (Region 4), 1/09 (Regions 3), 1/10 (Regions 1&2,3,4), 1/11 (Regions 1&2,3), 1/12 (Regions 3,5), 1/13 (Regions 1&2,3,4,5), 1/14 (Regions 3,5), 1/15 (Regions 3,5), 1/16 (Regions 3, 5), 1/17 (Regions 3, 5), 1/18 (Regions 3, 5), 1/19 (Regions 3), 1/20 (Regions 3,5), and 1/21 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.51	0.34	0.31	0.40
Median Rate*	0.20	0.37	0.22	0.26	0.33

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡					
Condition	**January**			**Cumulative (Year to Date)****		
Vaccine-Preventable Diseases	**2017**	**Mean***	**Median***	**2016**	**Mean***	**Median***
Aseptic meningitis	8	19.6	22	8	19.6	22
Meningococcal disease	0	0.8	1	0	0.8	1
Measles	0	0	0	0	0	0
Mumps	0	0.4	0	0	0.4	0
Rubella	0	0	0	0	0	0
Pertussis	1	10.6	11	1	10.6	11
Foodborne Diseases	**2017**	**Mean***	**Median***	**2016**	**Mean***	**Median***
Salmonellosis	13	37	38	13	37	38
Shigellosis	13	10	8	13	10	8
Campylobacteriosis	26	35	33	26	35	33
Shiga toxin-producing Escherichia coli (STEC)	3	3.2	2	3	3.2	2
Listeriosis	2	0.4	0	2	0.4	0
Arboviral Diseases	**2017**	**Mean***	**Median***	**2016**	**Mean***	**Median***
West Nile Fever	0	0	0	0	0	0
Lyme Disease	7	43	44	7	43	44
Emerging Infectious Diseases	**2017**	**Mean***	**Median***	**2016**	**Mean***	**Median***
Chikungunya	0	0.4	0	0	0.4	0
Dengue Fever	0	1.4	1	0	1.4	1
Zika Virus***	0	1.8	0	0	1.8	0
Other	**2017**	**Mean***	**Median***	**2016**	**Mean***	**Median***
Legionellosis	5	6.4	5	5	6.4	5

‡ Counts are subject to change *Timeframe of 2011-2015 **Includes January through current month

*** As of January 27, 2017, the total Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection is 162.

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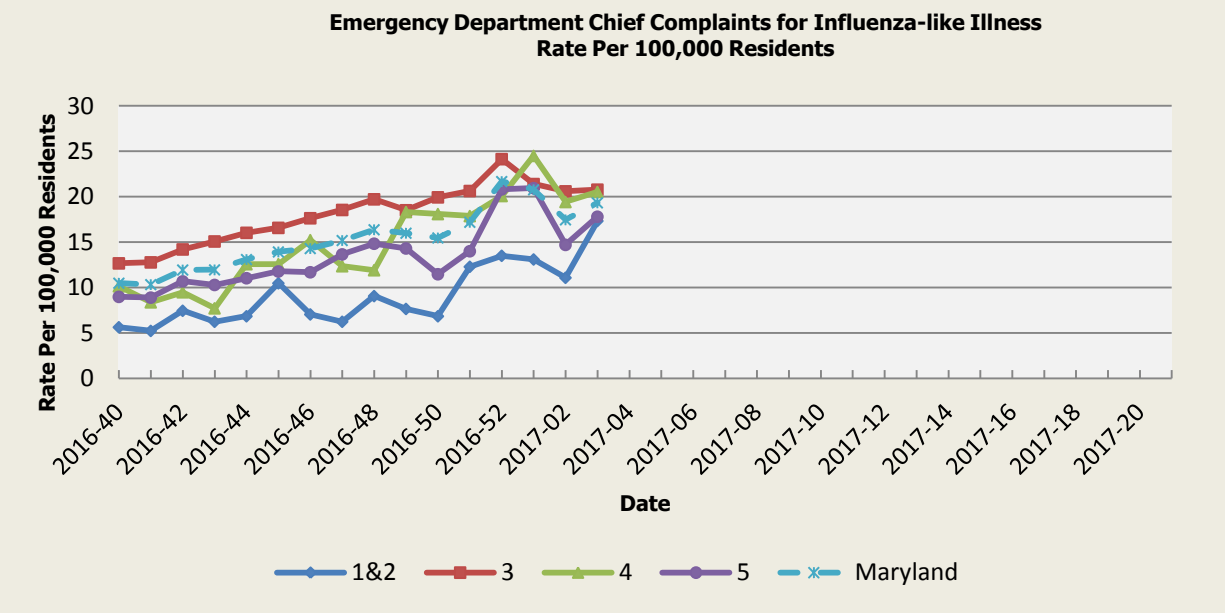
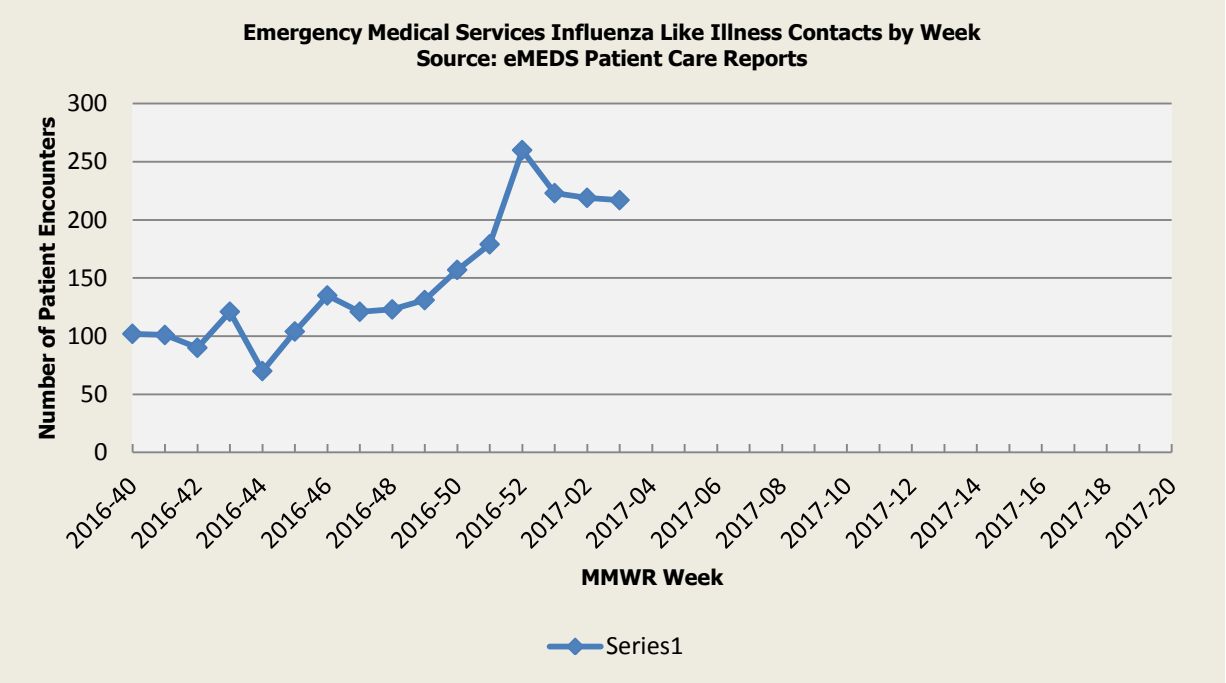
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 41 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 03 was: Widespread Geographic Spread with Low Intensity.



	Influenza-like Illness Baseline Data Week 1 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. This data is reported for trending purposes only.

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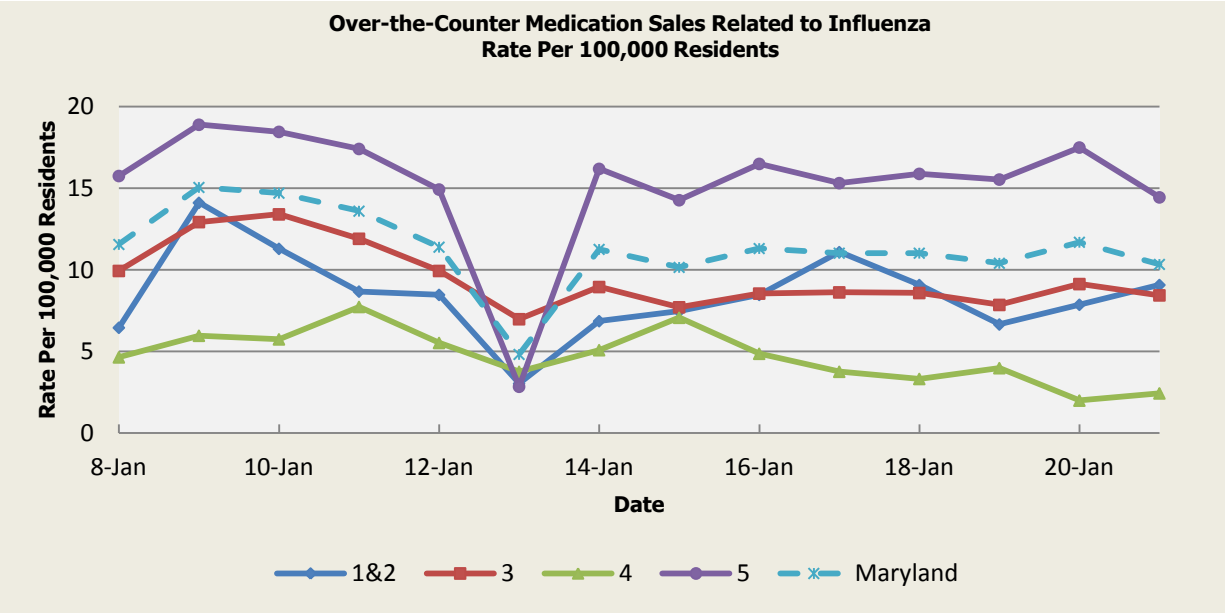
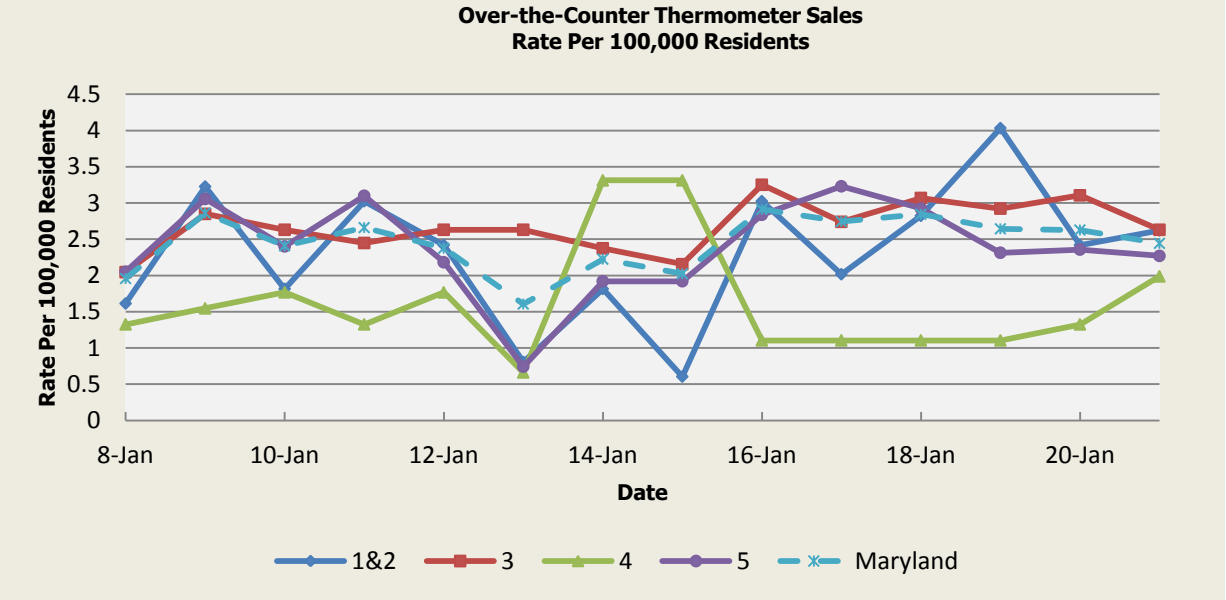


There was an appreciable increase above baseline in the rate of OTC medication sales on 1/08 (Region 3), 1/09 (Regions 1&2,3,4,5), 1/10 (Regions 1&2,3,4,5), 1/11 (Regions 1&2,3,4,5), 1/12 (Regions 1&2,3,4), 1/15 (Regions 3,4), 1/16 (Regions 3,5), 1/17 (Regions 1&2), 1/18 (Regions 1&2), 1/20 (Regions 1&2,5), and 1/21 (Regions 1&2). These increases are not known to be associated with any outbreaks.

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.86	4.69	2.60	8.21	5.79
Median Rate*	2.82	3.98	2.21	7.60	5.19

* Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.48	3.30	2.54	4.50	3.72
Median Rate*	3.23	3.07	2.43	4.10	3.46

* Per 100,000 Residents

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 19, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 856, of which 452 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza:

H5N8 AVIAN INFLUENZA (ASIA): 06 Jan 2017, Veterinarians are investigating what may be a 3rd case of bird flu in the Czech Republic, after a poultry breeder near Ivančice in South Moravia [Jihomoravský] discovered 2 dead specimens at his farm, spokesman of the State Veterinary Service Petr Pejchal told the Czech News Agency on [Thu 5 Jan 2017]. Minister of Agriculture on [Wed 4 Jan 2017] confirmed the outbreak of avian influenza in the Czech Republic. Tests have shown that it is the H5 strain, which doesn't pose threat to people. Read more: http://www.promedmail.org/post/4745034

AVIAN INFLUENZA (CHILE): 05 Jan 2017, Chile has detected bird flu at a turkey production plant run by poultry producer Agrosuper in the country's central Valparaiso region, the Agriculture and Livestock Service (SAG) said on [Wed 4 Jan 2017]. SAG said it plans to cull the affected birds and quarantine the area to prevent the infectious disease from spreading. No humans have been affected by the outbreak, it said. Read More: http://www.promedmail.org/post/4744931

Human Avian Influenza: *[There were no reports of human cases of avian influenza in the United States at the time that this report as compiled.]*

H7N9 AVIAN INFLUENZA, HUMAN (CHINA): 05 Jan 2017, On 30 Dec 2016, the Department of Health, Hong Kong Special Administrative Region (SAR) notified WHO of a case of laboratory-confirmed human infection with avian influenza A (H7N9) virus. Read more: http://www.promedmail.org/post/4740477

NATIONAL DISEASE REPORTS

LEPROSY (FLORIDA): 01 Jan 2017, According to the Florida Department of Health data, the number of confirmed leprosy cases in Florida stands at 18 in 2016 to date [31 Dec 2016], down from the 28 cases reported in 2015. Volusia County reported 2 cases while Alachua, Bay, Broward, Clay, Martin, Polk and Seminole counties reported 1 a piece. Most (128 or 73 percent) of these new cases were reported in Arkansas, California, Florida, Hawaii, Louisiana, New York and Texas. Read more: http://www.promedmail.org/post/4736085

PERTUSSIS (WISCONSIN): 01 Jan 2017, in northern Wisconsin 2 counties have released new figures regarding the number of whooping cough cases. The Oneida County and Vilas County health department reports collectively there are 39 confirmed cases, 29 probable, and 98 suspected cases of whooping cough. The number of cases prompted the Rhinelander School District to extended its

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Christmas break by 3 days. According to a news release, Oneida County health officials reported a decrease in new identified cases. Read More: http://www.promedmail.org/post/4735420

LYME DISEASE (CALIFORNIA): 29 Dec 2016, Erie County's record number of Lyme disease cases in 2016 is probably due to a couple of different factors, a local infectious disease expert said. At least 186 cases have been reported to the Erie County Department of Health in 2016, well above the record 71 cases reported in 2015. As recently as 2008, only 9 cases were reported in the county. Read more: http://www.promedmail.org/post/4731028

INTERNATIONAL DISEASE REPORTS

LEGIONELLOSIS (EUROPEAN UNION): 30 Dec 2016, an increase in cases of legionellosis, is reported among European Union travelers returning from Dubai. 26 symptomatic cases since 1 Oct 2016 have been reported. The majority of reported cases have been associated with different hotels distributed geographically throughout Dubai. This suggests that the cases have been exposed to a common source in the wider environment and not associated with the hosting sites. Read More: http://www.promedmail.org/post/4733569

Q FEVER (AUSTRALIA): 31 Dec 2016, a big rise in the potentially deadly Q fever has sparked a health alert and officials have urged people who work with animals to get vaccinated. There have been 27 cases reported this year [2016], more than double the number last year [2015] and almost triple the number of cases 5 years ago. Read More: http://www.promedmail.org/post/4735189

DIPTHERIA (AUSTRIA): 01 Jan 2017, On [22 Dec 2016], a 60-year old Austrian presented to hospital A in Austria after returning from a one-month-vacation [23 Nov-21 Dec 2016] in the Democratic Socialist Republic of Sri Lanka. The outpatient showed signs and symptoms of infection of the tissues near a fingernail (panaritium). Read More: http://www.promedmail.org/post/4736133

CHIKUNGUNYA (PAKISTAN): 02 Jan 2017, the chikungunya virus has reached the federal capital after Karachi, as the National Institute of Health (NIH) has identified and verified the presence of the virus in a lady who reached Islamabad from Karachi. After receiving the report, the health department officials fumigated the residence of victim S as well as 25 other houses nearby. The victim had reached in Islamabad 3 days ago from Karachi and stated to be a resident of Saudabad, a locality near Malir. Read More: http://www.promedmail.org/post/4731668

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website:
http://phpa.dhmh.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.dhmh.maryland.gov
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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

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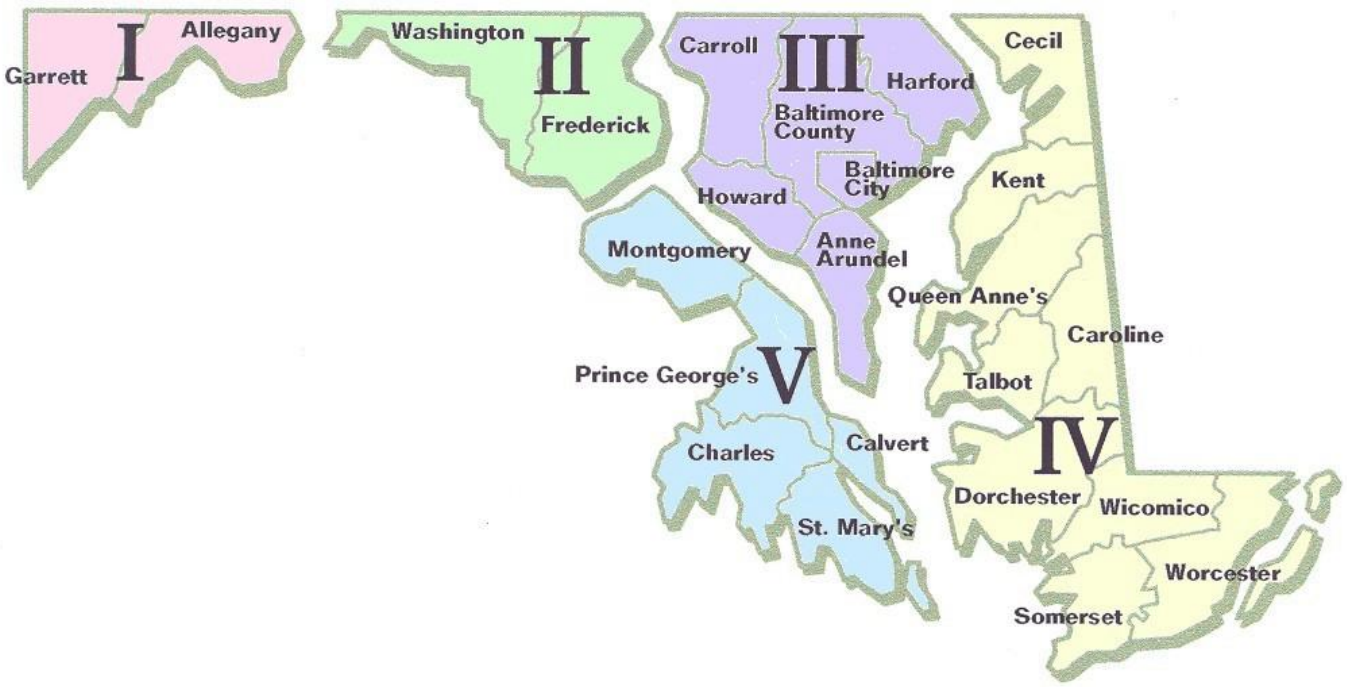
Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County



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